

TO: ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES & SERVICE CENTERS
ALL REGENCY COMMUNICATIONS PROFESSIONAL SALES REPRESENTATIVES

MODELS AFFECTED: MCH40II (ALL), MCCH-06R, MA-336

SYMPTOMS: ENCOUNTERED PROBLEMS MAINTAINING RECEIVER SENSITIVITY

OVER A 1.5 MHz SPREAD IN SOME UNITS

CAUSE: Slight Impedance Mis-Match and Loss of Gain in Front-End

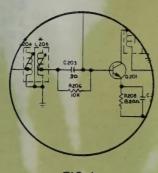
Due to Normal Component Variations

#### SOLUTION:

Change C203 from 15pF to 30pF, Regency P/N 1500-0300-550. Change R208 from 1K to 820 ohm, Regency P/N 4704-0821-032.

#### SERVICE MANUAL CHANGES:

MCH40 Manual (0300-4091-800) remove pages 12 and 13. MCCH-06R Manual (0300-4200-700) remove pages 1 and 3. MA-336 (0300-4289-800) remove page 1. Change Schematics per Figure 1. Replace the pages removed with those attached to this Service Bulletin.



TECHNICAL SERVICE DEPARTMENT REGENCY COMMUNICATIONS, INC.

FIG. I

AC496



### SECTION 6 PARTS LISTS

## 6-1 RECEIVER BOARD PARTS LIST

LOCATION	DESCRIPTION	PART NUMBER
RESISTORS (All resisto	rs are ¼W 5% unless other	wise noted)
R201A Range C	15K ¼W 10%	4700-0153-042
R201B Range C	15K ¼W 10%	4700-0153-042 (4 ch)
R201C Range C	15K ¼W 10%	4700-0153-042 (4 ch)
R201D Range C	15K ¼W 10%	4700-0153-042 (4 ch)
R202A	4.7K ¼W 10%	4700-0472-042
R202B	4.7K ¼W 10%	4700-0472-042 (4 ch)
R202C	4.7K ¼W 10%	4700-0472-042 (4 ch)
R202D	4.7K ¼W 10%	4700-0472-042 (4 ch)
R203	470 ohm	4704-0471-032 (4 ch)
R204	100 ohm	4704-0101-032
R205	4.7K	4704-0472-032
R206	10K ohm	4704-0103-032
R207 R208	100 ohm WW 2W 5%	4707-0101-042
R209	820 ohm	4704-0821-032
R210	4.7K ohm	4704-0472-032
R211	3.9K 470 ohm	4704-0392-032
R212	680 ohm	4704-0471-032 4704-0681-032
R213	1K ohm	4704-0681-032
R214	33 ohm	4704-0102-032
R215	47K	4704-0330-032
R216	150K	4704-0154-032
R217	100K ohm	4704-0104-032
R218	3.9K	4704-0392-032
R219	not used	1,01 0002
R220	680K ohm	4704-0684-032
R221	not used	
R222	6.8K ohm	4704-0682-032
R223	not used	
R224	not used	
R225	8.2K	4704-0822-032
R226	470K	4704-0474-032
R227	470K	4704-0474-032
R228	47K	4704-0473-032
R229	47K	4704-0473-032
R230	47K	4704-0473-032
R231	270 ohm	4704-0271-032
R232	2.7 ohm	4704-0279-032
R233	680 ohm	4704-0681-032
R234	2.2K	4704-0222-032
R235	lK	4704-0102-032
R236	not used	4704 0102 022
R237	10K	4704-0103-032
R238	10K	4704-0103-032
R239	10K	4704-0103-032
R240	10K	4704-0103-032

LOCATION	DESCRIPTION	PART NUMBER
INTEGRATEDCIRCUIT		THE STATE OF
IC201 IC202 IC203	sub system IF IC Audio IC 8V Reg	3130-6056-500 3130-5407-602 3130-0000-014
TRANSISTORS		
Q201 Q202 Q203 Q204 Q205	Red top SPS 1473 2N5668 2N5130 not used SPS952	4801-0000-035 4811-0000-030 4801-0000-095
CRYSTAL FILTER	313732	4001 0000-010
XF201 XF202 XF203	xtal filter 10.7 MHz xtal filter xtal filter 10.7 MHz	2705-3232-200 2705-1306-600 2705-3232-200
CERAMIC FILTER		
CF201	CFU-455D2	2700-3209-500
CRYSTAL		
Y202	crystal 10.245 MHz	2301-3151-601
DIODES		
CR201A,B,C,D CR202 CR203 CR204 CR205 CR206	IN4148 IN4148 IN4148 IN4148 IN4148	4805-1241-200 (4 ch) 4805-1241-200 4805-1241-200 4805-1241-200 4805-1241-200 4805-1241-200
COILS		
L201A L201B,C,D Range A L201B,C,D Range B L201B,C,D Range C L202A,B,C,D L203 L204 Range A L204 Range B L204 Range B L205 Range A L205 Range B L205 Range C L206 L207 L208 L209	variable variable variable variable choke RF 5.6 uhy choke RF 5.6 uhy coil helical 13½T coil helical 12½T coil helical 13½T coil helical 13½T coil helical 13½T coil helical 13½T coil helical 13 coil helical 13 coil helical 13 coil d½T choke 100 uhy coil 2½T coil 3½T	1800-3247-203 1800-3247-203 (4 ch) 1800-3247-203 (4 ch) 1800-3247-203 (4 ch) 1802-0569-008 (4 ch) 1802-0569-009 (4 ch) 1800-5129-112 1800-5129-110 1800-5129-111 1800-5129-110 1800-5129-111 1800-3406-903 1802-0101-008 1800-3406-904

LOCATION		DESCRIPTION	PART NUMBER	
L210 L210 L210 L211 L212	Range A Range B Range C	choke .47 uhy choke .27 uhy choke .27 uhy coil wht 13½T not used	1802-0478-008 1802-0278-008 1802-0279-008 1800-3191-401	
L213 L214		coil RF choke 5.6 uhy	1800-6055-801 1802-0569-008	
CAPACITORS				
C201A C201B,C,D C201B,C,D C201B,C,D C201B,C,D C202A,B,C,D C202A,B,C,D C202A,B,C,D C202A,B,C,D C203 C204 C205 C205 C206 C207 C208 C208 C209 C210 C210 C211 C212 C213 C214 C214		10pf 50V 10% 8.2pf 500V NPO 5.6pf 500V 10% NPO 10pf 50V 10% 8.2pf 500V NPO 5.6pf 500V 10% NPO .6pf 500V 10% NPO .0lmf +8-2 50V .0lmf +8-2 50V .0lmf +8-2 50V .0lmf +8-2 50V 30pf 5% NPO .0lmf +8-2 50V 8.2pf 10% 500V NPO 5.6pf 10% 500V NPO 150pf 50V 360pf 50V 5% LCQ17 1pf MUD 10% .68pf MUD 10% .68pf MUD 10% .00lmf +8-2 50V 15pf CD 50V NPO 8.2pf 10% 500V 6.8pf 10% 500V 6.8pf 10% 500V 6.8pf 10% 50V NPO .0lmf +8-2 50V 15pf CD 50V NPO .0lmf +8-2 50V 15pf D 50V NPO .0lmf +8-2 50V .00lmf 100V 10%	1500-0100-650 1500-0829-905 1500-0569-905 1500-0829-905 1500-0829-905 1503-0103-007 1503-0103-007 1503-0103-007 1500-0829-905 1500-0569-905 1503-0103-007 1500-0829-905 1523-0151-002 1506-0361-550 1510-0688-900 1510-0688-900 1510-0688-900 1510-0689-905 1500-0150-650 1500-0829-905 1500-0829-905 1500-0829-905 1500-0689-905 1500-0689-905 1500-0689-905 1500-0150-605 1500-0150-605 1500-0100-905 1503-0103-007 1500-0150-605 1500-0120-605 1500-0120-605 1500-0120-605 1500-0120-605 1500-0120-605 1500-0120-605 1500-0150-550 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007	(4 ch) (4 ch) (4 ch) (4 ch) (4 ch) (4 ch)

LOCATION	DESCRIPTION	PART NUMBER
C233	33pf 10% 50V NPO	1500-0330-650
C234	.lmf +8-2 50V	1503-0104-010
C235	150pf SM 50V LCQ17	1506-0151-550
C236	150pf SM 50V LCQ17	1506-0151-550
C237	150pf CD 50V	1523-0151-002
C238	.005 CD +8-2 50V	1503-0502-006
C239	.0047mf 100V 10%	1508-0472-610
C240	.48mf TANT 15V 20%	1515-0478-003
C241	.0047mf 100V 10%	1508-0472-610
C242	.05mf +8-2 25V	1503-0503-004
C243	.005mf	1503-0502-005
C244	1000mf 16V	1513-0102-002
C245	220mf 16V 85D	1513-0221-002
C246	.lmf +8-2 50V	1503-0104-010
C247	220mf 16V 85D	1513-0221-002
C248	lmf 16V 85D	1513-0010-002
C249	15pf 10% 50V NPO	1500-0150-650
C250	.068mf (mylar)	1508-0683-610
C251	.01mf +8-2 50V	1503-0103-007
C252	.01mf +8-2 50V	1503-0103-007
C253	.01mf +8-2 50V	1503-0103-007
C254	not used	
C255	150pf	1523-0151-002
C256	not used	
C257	.01mf +8-2 50V	1503-0103-007
C258	150pf	1506-0151-002
C259	not used	
C260	150pf	1503-0151-007
C261	.01mf +8-2 50V	1503-0103-007

## 6-2 TRANSMITTER BOARD PARTS LIST

### RESISTORS (All resistors are \\$W 5% unless otherwise noted)

R301-R304	not used	
R305	10 ohm	4704-0100-032
R306	10 ohm	4704-0100-032
R307	3.9K	4704-0392-032
R308	270 ohm	4704-0271-032
R309	10K	4704-0103-032
R310	100K	4704-0104-032
R311	47K ohm	4704-0473-032
R312	1 meg	4704-0105-032
R313	var 10K	4751-3407-101
R314	not used	
R315	68 ohm	4704-0680-032
R316	68 ohm	4704-0680-032
R317	470 ohm	4704-0471-032
R318	100 ohm	5705-0101-032
R319	4.7K ohm	4704-0472-032
R320	47K ohm	4704-0473-032
R321	12K	4704-0123-032
R322	470K	4704-0474-032

- 4			
LOCATION	DESCRIPTION	PART NO.	
R328	1.8K	4704 -0182-032	
R329	2.2K	4704-0182-032	
R330	220 ohm	4704-0221-03.2	
R331	5.6K	4704-0562-032	
R332	film 22K	4704-0362-032	
R333	not used	47040223-032	
R334	47K ohm	4704 -0473-03.2	
R335	not used	4/04-04/3-03/2	
R336A		4700-0153-042	
R336B,C,D	41. 200	4700-0153-042	(1 -1-)
R337A	res comp (only 15K $\frac{1}{4}$ W 10% 47K ohm	47040473-03.2	(4 ch)
R337B,C,D	47K Ohm	4704-0473-032	(1 ab)
R338	47K ohm	4704-0473-032	(4 ch)
R339D	470 ohm	4704-0471-032	(4 ch)
R340	wire wound 100 ohm 2W 5%	4707-0101-031	(4 CII)
R341	not used	4707-0101-031	
R342	not used		
R343	not used		
R344	560 ohm	4704-0561-032	
R345	10K	4704-0103-032	
R346	1K	4704-0102-032	
R347	12K ohm	4704-0123-032	
R348	not used		
R349	3.9K ohm	47040392-032	
R350	film 22K	47040223-03.2	
R351	not used		
R352	not used		
R353	1 ohm 1W 10%	4701-0109-045	
R354	not used		
R355	not used		
R356	not used		
R357	not used		
R358A,B,C,D Range A	film 15K	47040153-032	(4 ch)
22502			

### THERMOSTAT

ST301	follow a company to the second	5301-3407-601
5.1.301	thermostat	5301=3407=601

film 15K

film 15K

# INTEGRATED CIRCUIT

R358A,B,C,D Range B

R358A,B,C,D Range C

IC301 IC LM358N 3130-3167-909

-11-

4704-0153-032 (4 ch)

4704-0153-032 (4 ch)

LOCATION	DESCRIPTION	PART NO.	
RESISTORS (All resistors are	5% 4W unless otherwise noted)		
R201	not used		
R202A	4.7K res comp (only) \u034W 10%	4700-0472-042	
R202B,C,D	4.7K res comp (only) 14W 10%	4700-0472-042	(4 ch)
R203	470 ohm	4704-0471-032	(4 ch)
R204	100 ohm	4704-0101-032	
R205	4.7K	4704-0472-032	
R206	10K ohm	4704-0103-032	
R207	100 ohm wire wound 2W 5%	4707-0101-031	
R208	820 ohm	4704-0821-032	
R209	4.7K ohm	4704-0472-032	
R210	3.9K	4704-0392-032	
R211 ·	470 ohm	4704-0471-032	
R212	680 ohm	4704-0681-032	
R213	1K ohm	4704-0102-032	
R214	33 ohm	4704-0330-032	
R215	47K	4704-0473-032	
R216	150K	4704-0154-032	
R217	100K ohm	4704-0104-032	
R218	3.9K	4704-0392-032	
R219	not used		
R220	680K ohm	4704-0684-032	
R221	not used	4804 0500	
R222	6.8K ohm	4704-0682-032	1000
R223	not used		1200
R224	not used		
R225	8.2K	4704-0822-032	
R226	470K	4704-0474-032	
R227	470K	4704-0474-032	
R228	47K	4704-0473-032	
R229	47K	4704-0473-032	
R230	47K	4704-0473-032	
R231	270 ohm .	4704-0271-032	
R232	2.7 ohm	4704-0279-032	
R233	680 ohm	4704-0681-032	
R234	2.2K	4704-0222-032	
R235 R236	1K	4704-0102-032	
	1.2 ohm	4704-0129-045	
INTEGRATED CIRCUIT		air . 65	
70203	and and an TR		
IC201	sub system IF	3130-6056-500	
IC202	IC Audio	3130-5407-602 3130-0000-023	
IC203	IC 8V Reg	3130-0000-023	
TRANSTEROPS			
TRANSISTORS			
Q201	Red top	4801-0000-035	
Q202	2N5668	4811-00-0-030	
Q203	2N5130	4801-0000-095	- 11 4
Q204	not used	4001-0000-093	
Q205	SPS952	4801-0000-010	
2200	010332	4001-0000-010	

CRYSTAL FI	LTER			
XF201		cry filter	2705-3232-200	
XF202		cry filter	2705-1306-600	
XF203		cry filter	2705-3232-200	
		The state of the s		
	- SHELL			
CERAMIC FI	LTER			
CF201		ceramic filter	2700-3209-500	
CRYSTAL				
		THE RESIDENCE		
Y202		crystal	2301-3151-601	
		ory boar	2301 3131 001	
DIODES				
DIODES				
CD0013 D C		T114240		
CR201A,B,C,	, D	IN4148	4805-1241-200	(4 ch)
CR202		IN4148	4805-1241-200	
CR203		IN4148	4805-1241-200	
CR204		IN4148	4805-1241-200	
CR205		IN4148	4805-1241-200	
CR206		IN4148	4805-1241-200	
COILS				
	The state of			
L201A		variable	1800-3247-203	
L201B,C,D	Range A	variable	1800-3247-203	(1 -1)
		variable		(4 ch)
L201B,C,D	Range B		1800-3247-203	(4 ch)
L201B,C,D	Range C	variable	1800-3247-203	(4 ch)
L202A,B,C,D	)	choke rf 5.6 uhy	1802-0569-008	(4 ch)
L203		choke rf 5.6 uhy	1802-0569-008	(4 ch)
L204	Range A	coil helical 13½T	1800-5129-112	
L204	Range B	coil helical 13T	1800-5129-110	
L204	Range C	coil helical 12½T	1800-5129-111	
L205	Range A	coil helical 13½T	1800-5129-112	
L205	Range B	coil helical 13T	1800-5129-110	
	Range C	coil helical 12½T	1800-5129-111	
L206		coil 4½T	1800-3406-903	
L207		choke 100 uhy	1802-0101-008	
L208		coil 2½T	1800-3406-902	
L209		coil 3½T	1800-3406-904	
	Dange 3		1800-3406-904	
L210	Range A	choke .47 uhy		
L210	Range B	choke .27 uhy	1802-0278-008	
L210	Range C	choke .27 uhy	1802-0278-008	
L211		coil wht 13½T	1800-3191-401	
L212		not used	*	
L213		coil rf	1800-6055-801	
L214		choke 5.6 uhy	1802-0569-008	
	THE RESERVE			

#### CAPACITORS

C201A Range A	10 pf 50V 10%	1500 0100 650	
C201A Range B	8.2 pf 500V NPO	1500-0100-650	
C201A Range C	5.6 pf 500V 10% NPO	1500-0829-905	
		1500-0569-905	2- 1
	10 pf 50V 10%	1500-0100-650 (4 (	
C201B,C,D Range B	8.2 pf 500V NPO	1500-0829-905 (4 (	
C201B,C,D Range C	5.6 pf 500V 10% NPO	1500-0569-905 (4 0	
C202A,B,C,D Range A	.01 mf +8-2 50V	1503-0103-007 (4 0	
C202A,B,C,D Range B	.01 mf +8-2 50V	1503-0103-007 (4 0	
C202A,B,C,D Range C	.01 mf +8-2 50V	1503-0103-007 (4 0	ch)
C203	30 pf 5% NPO	1500-0300-550	
C204	.01 mf +8-2 50V	1503-0103-007	
C205 Range A	8.2 pf 10% NPO 500V	1500-0829-905	
C205 Range B	5.6 pf 10% NPO 50V	1500-0569-905	
C205 Range C	3.9 pf 10% 500V	1500-0399-905	
C206	150pf 20% 50V Z5F	1523-0151-002	
C207	360 pf 50V 5% LCQ17	1506-0361-550	
C208 Range A	l pf MUD 10%	1510-0010-900	
C208 Range B	68 pf MUD 10%	1510-0688-900	
C208 Range C	68 pf MUD 10%	1510-0688-900	
C209	.001 mf +8-2 50V	1503-0102-003	
C210 Range A	15 pf CD NPO 50V	1500-0150-650	
C210 Range B	8.2 pf 10% 500V	1500-0829-905	
C210 Range C	6.8 pf 10% 500V	1500-0689-905	
C211	.82 pf MUD 10%	1510-0828-900	
C212	33 pf 10% NPO 50V	1503-0330-650	
C213	.01 mf +8-2 50V	1503-0103-007	
C214 Range A	12 pf CD NPO 500V		
C214 Range B		1500-0120-605	
	10 pf 10% NPO 500V	1500-0100-905	
C214 Range C	8.2 pf 10% 50V	1500-0829-905	
	68 pf 50V 5%	1524-0680-002	
C216	.001 mf +8-2 50V	1503-0102-003	
C217	390 pf 50V 5% LCQ17	1506-0391-550	
C218	.05 mf +8-2 25V	1502-0503-004	
C219	. 150 pf 50V 50V	1506-0151-550	
C220	4.7 mf 10% NPO 50V	1500-0479-905	
C221	4.7 mf 10% NPO 50V	1500-0479-905	
C222	.01 mf +8-2 50V	1503-0103-007	
C223	47 mf 10V 20	1515-0470-002	
C224	not used	a spring i mange 8	
C225	150 pf 5% 50V LCQ17	1506-0151-550	
C226	68 pf 50V 5%	1524-0680-002	
C227	not used	7 17 m	
C228	.1 mf +8-2 50V	1503-0104-010	
C229	.1 mf +8-2 50V	1503-0104-010	
C230	.47 mf 8-12 BC12	1502-0474-006	
C231	.01 mf 100V	1508-0103-610	
C232	.001 mf 100V 10%	1508-0102-610	
C233	33 pf 10% NPO 50V	1500-0330-650	
C234	.1 mf +8-2 50V	1503-0104-010	
C235	150 pf SM 50V LCQ17	1506-0151-550	
C236	150 pf SM 50V LCQ17	1506-0151-550	
C237	150 pf CD 50V	1523-0151-002	
C238	.005 CD +8-2 50V		
The same and the s	• • • • • • • • • • • • • • • • • • •	1503-0502-005	

LOCATION		DESC	CRIE	PTIC	ON	PA	RT NUMBER
Resistors (All	resistors	are	5%	₹W	unless	otherwise	noted.)
R201 R202D R203	not used 4.7K carbo	on co	qmo			470	0-0472-042
R204 R205 R206	100 ohms 4.7K 10K					470	4-0101-032 4-0472-032 4-0103-032
R207 R208 R209 R210 R211 R212 R213 R214 R215 R216 R217 R218 R219 R220 R221 R222 R223 - R228 R229	not used 820 ohm 4.7K 3.9K 470 ohm 680 oym 1K 33 ohm 47K 150K 100K 3.9K ohm not used 680K not used 6.8K not used 47K	•				4704 4704 4704 4704 4704 4704 4704 4704	4-0821-032 4-0472-032 4-0392-032 4-0471-032 4-0681-032 4-0102-032 4-0330-032 4-0330-032 4-0473-032 4-0104-032 4-0392-032 4-0684-032 4-0682-032 4-0473-032
Capacitors							
C201D Range A C201D Range B C201D Range C C202	8.2pF NPO					1500	0-0100-650 0-0829-905 0-0569-905
C203 C204 C205 Range A C205 Range B C205 Range C C206 C20712 C208 Range A C208 Range B C208 Range C C209 C210 Range A C210 Range B C210 Range B C210 Range C C211 C212 C213	30pf NPO .01mfd Z50 8.2pf NPO 5.6pf NPO 3.9pf NPO 150pf Z5f 360pf 1.0pf Mud .68pf Mud .68pf Mud .001mfd CD 15pf NPO 8.2pf NPO 6.8pf NPO .82mfd Mud 33pf NPO .01mfd Z50					1500 1500 1500 1500 1510 1510 1510 1500 1500 1500	0-0300-550 3-0103-007 0-0829-905 0-0569-905 0-0399-905 3-0151-002 5-0361-550 0-0010-900 0-0688-900 0-0688-900 0-0688-900 0-0829-905 0-0829-905 0-0828-900 0-0330-650 0-0330-650

LOCATION	DESCE	RIPTION	PART NUMBER
C214 Range A C214 Range B C214 Range C C215 C216 C217 C218 C219 C220 C221 C222 C223 C224 C225 C226 C227 C228 C229 C230 C231 C232 C231 C232 C233 C234 C235 C236 C237 C238 C237 C238 C239 C240 - C252 C253 C254 - C257 C258 C259	15pf NPO 12pf NPO 10pf DM15 68pf NPO .00lmfd CD 390pf SM .0lmfd Z5U .00lmfd CD 4.7pf NPO 4.7pf NPO 0lmfd Z5U 47mfd Tant not used 150pf SM 68pf NPO not used .lmfd Z5U .47mfd .0lmfd Mylar .00lmfd Z5U 150pf SM 150pf SM 150pf SM 150pf SSM 150pf SM 150pf Z5f not used .01mfd Z5U not used .01mfd Z5U not used	(7	1500-0150-650 1500-0120-605 1504-0100-505 1524-0680-002 1503-0102-003 1506-0391-550 1503-0103-007 1503-0103-007 1503-0103-007 1503-0103-007 1515-0470-002 1506-0361-550 1524-0680-002 1503-0104-010 1503-0104-010 1503-0104-010 1508-0103-610 1508-0102-610 1506-0151-550 1508-0472-610 1503-0103-007 1506-0151-550
C260 C261	not used .01mfd Z5U		1503-0103-007
INTEGRATED CIRCUIT	Sub System IF		3130-6056-500
TRANSISTORS			500 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Q201	NPN Red Top	September 1998	4801-0000-035
Q202 Q203	J-FET 2N5668 NPN SM43065	Sev Bun 1988.	4811-0000-030 4801-0000-100
DIODES			
CR201 ZR202 CR203	not used not used IN4148	COM MORE TO A STATE OF THE STAT	4805-1241-200

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